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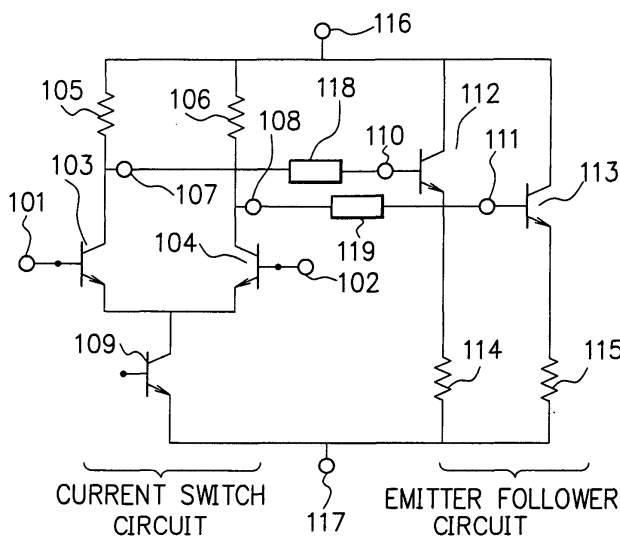
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(54) **Semiconductor integrated circuit and manufacturing method thereof**

(57) A semiconductor integrated circuit including interconnect for connecting a current switch circuit and an emitter follower circuit and a method for producing the semiconductor integrated circuit. A matching between a characteristic impedance of the interconnect and an output impedance of the current switch circuit at its output

and also an input impedance of the emitter follower circuit at its input in a predetermined frequency range is conducted to prevent an occurrence of distortion of a waveform of a data signal and a gain peaking of frequency characteristic. An impedance converter circuit can be placed at the input or output of the interconnect to match the characteristic impedance of the interconnect.

**F I G. 7**





## EUROPEAN SEARCH REPORT

Application Number  
EP 02 00 5652

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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 16 March 2009	Examiner Gospodinova, M
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons &amp; : member of the same patent family, corresponding document</p>			

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Application Number  
EP 02 00 5652

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on  
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